

IN THE CLAIMS:

Please cancel Claims 7 and 27 without prejudice or disclaimer of the subject matter recited therein.

Please amend Claims 1, 8, 10-12, 24, 28-30, 32, 34, 36 and 38 as follows.

1. (Currently Amended) A method of generating a colored or shaded texture for images, the images to be displayed on a display device or printed, said method including the steps of:

(a) providing a plurality of shape elements, each shape element defining a surface;

(b) assigning a focal point to each of the shape elements, wherein each shape element has an opacity that ~~providing each of the shape elements with an opacity which varies over its surface~~ according to a distance from a corresponding focal point;

(c) identifying a plurality of substantially equidistant points within a predetermined region of the images;

(d) placing a shape element at each identified point, such that adjacent shape elements overlap with each other to fill the predetermined region of the images such that the region when so filled has a substantially uniform opacity; and

(e) rendering the shape elements for output to a printer or display device, such that an interference of the opacities of the overlapping elements generates a colored or shaded texture.

2. (Previously Presented) A method according to claim 1, wherein the shape elements are regular geometric shapes.
3. (Original) A method according to claim 2, wherein each of the shape elements is of the same general shape.
4. (Original) A method according to claim 2, wherein the shape elements are of a similar size.
5. (Original) A method according to claim 4, wherein the shape elements are circles.
6. (Original) A method according to claim 4, wherein the shape elements include squares, hexagons, or other regular polygons.
7. (Cancelled)
8. (Currently Amended) A method according to claim 7 1, wherein each focal point is located within its associated shape element.

9. (Original) A method according to claim 8, wherein each focal point is located at or adjacent to a center of its associated shape element.

10. (Currently Amended) A method according to claim 7 1, wherein the opacity at any given point within each shape element is determined by the distance of that point from the focal point.

11. (Currently Amended) A method according to claim 7 1, wherein the opacity of each shape element varies between the focal point and the perimeter of the shape element in accordance with a predetermined function.

12. (Currently Amended) A method according to claim ~~10~~ 11, wherein the predetermined function is exponential or linear.

13. (Original) A method according claim 1, wherein at least some of the shape elements have a color component associated with them.

14. (Original) A method according to claim 13, wherein the color components vary from shape element to shape element.

15. (Original) A method according to claim 13, wherein the color component of each shape element varies across its surface.

16. (Original) A method according to claim 13, further including the step of varying the color components of the shape elements over time, and periodically rendering the shape elements.

17. (Original) A method according to claim 16, wherein the color components are varied in a cyclic fashion.

18. (Original) A method according to claim 17, wherein a period associated with the cyclic color change is selected at random for each shape element.

19. (Previously Presented) A method according to claim 1, further including the step of, if the image is displayed on a display device, varying the opacity of one or more of the shape elements over time, and periodically rendering the shape elements.

20. (Previously Presented) A method according to claim 19, wherein the opacity is varied in a cyclic fashion.

21. (Previously Presented) A method according to claim 20, wherein a period associated with the cyclic opacity change is selected at random for each shape element.

22. (Original) A method according to claim 1, further including the step of applying the colored or shaded texture within a boundary defined by a closed curve.

23. (Original) A method according to claim 22, wherein the closed curve is defined by a font character outline.

24. (Currently Amended) An apparatus for generating a colored or shaded texture for images, the images to be displayed on a display device or printed, said apparatus including:

(a) means for providing a plurality of shape elements, each of the shape elements defining a surface and having an opacity which varies across the surface;

(b) assignment means for assigning a focal point to each of the shape elements, such that the opacity of each shape element varies with distance from the focal point;

~~(b)~~ (c) means for identifying a plurality of substantially equidistant points within a predetermined region of the images;

(c) (d) means for placing a shape element at each identified point, such that adjacent shape elements overlap with each other to fill the predetermined region of the images such that the region when so filled has a substantially uniform opacity;

(d) (e) means for rendering the shape elements such that an interference of the opacities of the overlapping elements generates a colored or shaded texture; and

(e) (f) means for outputting the colored or shaded texture to a printer or display device.

25. (Previously Presented) An apparatus according to claim 24, wherein the shape elements are regular geometric shapes.

26. (Previously Presented) An apparatus according to claim 24, wherein the shape elements are circles.

27. (Cancelled)

28. (Currently Amended) An apparatus according to claim ~~27~~ 24, wherein the assignment means assigns the focal points to areas within the respective shape elements.

29. (Currently Amended) A method of producing a printed product including a laminar substrate formed from paper, card or other reproduction medium, said method including the steps of:

(a) providing a plurality of shape elements, each shape element defining a surface;

(b) providing each of the shape elements with an opacity which varies across the surface;

(c) assigning a focal point to each of the shape elements, wherein the opacity of each shape element varies with distance from the focal point;

(d) identifying a plurality of substantially equidistant points within a predetermined region of the ~~images~~ printed product;

(e) placing a shape element at each identified point, such that adjacent shape elements overlap with each other to fill the predetermined region of the printed product such that the region when so filled has a substantially uniform opacity;

(f) rendering the shape elements such that an interference of the opacities of the overlapping elements generates a colored or shaded texture; and

(g) printing or otherwise applying the colored or shaded texture to the laminar substrate.

30. (Currently Amended) A computer storage medium storing one or more computer software programs for execution on a computer, the computer software program or

programs including compiled or uncompiled software instructions for implementing a method of generating a colored or shaded texture for images to be displayed on a display device, stored or printed, including instructions for implementing the following steps:

- (a) providing a plurality of shape elements, each shape element defining a surface;
- (b) providing each of the shape elements with an opacity which varies across the surface;
- (c) assigning a focal point to each of the shape elements, wherein the opacity of each shape element varies with distance from the focal point;
- (e) (d) identifying a plurality of substantially equidistant points within a predetermined region of the images;
- (d) (e) placing a shape element at each identified point, such that adjacent shape elements overlap with each other to fill the predetermined region such that the region when so filled has a substantially uniform opacity; and
- (e) (f) rendering the shape elements such that an interference of the opacities of the overlapping elements generates a colored or shaded texture.

31. (Previously Presented) A computer storage medium according to claim 30, wherein the program or programs stored thereon include instructions for implementing the additional step of displaying the colored or shaded texture on a display device associated with the



computer, storing the colored or shaded texture on storage means associated with the computer or printing the colored or shaded texture on a printer associated with the computer.

32. (Currently Amended) A method of generating a colored or shaded texture for images, the images to be displayed on a display device or printed, said method including the steps of:

(a) providing a plurality of shape elements, each shape element defining a surface;

(b) providing each of the shape elements with an opacity which varies over its surface;

(c) assigning a focal point to each of the shape elements, wherein the opacity of each shape element varies with distance from the focal point;

(d) identifying a plurality of substantially equidistant points within a predetermined region of the images;

(e) placing a shape element at each identified point, such that adjacent shape elements overlap with each other to fill the predetermined region of the images such that the region when so filled has a substantially uniform opacity;

(f) rendering the shape elements for output to a printer or display device, such that an interference of the opacities of the overlapping elements generates a colored or shaded texture; and

(g) if the image is displayed on a display device, varying the opacity

of one or more of the shape elements over time, and periodically rendering the shape elements.

33. (Previously Presented) A method according to claim 32, wherein the opacity is varied in a cyclic fashion.

34. (Currently Amended) A method of generating a colored or shaded texture for images, the images to be displayed on a display device or printed, said method including the steps of:

(a) providing a plurality of shape elements, each shape element defining a surface;

(b) providing each of the shape elements with an opacity which varies over its surface;

(c) assigning a focal point to each of the shape elements, wherein the opacity of each shape element varies with distance from the focal point;

(d) identifying a plurality of substantially equidistant points within a predetermined region of the images;

(e) placing a shape element at each identified point, such that adjacent shape elements overlap with each other to fill the predetermined region of the images such that the region when so filled has a substantially uniform opacity, the region lying within a boundary defined by a closed curve; and

(f) rendering the shape elements for output to a printer or display

device, such that an interference of the opacities of the overlapping elements generates a colored or shaded texture.

35. (Previously Presented) A method according to claim 34, wherein the closed curve is defined by a font character outline.

36. (Currently Amended) A method of generating an interference texture for an image, said method comprising the steps of:

- a) defining at least one texture region within the image;
- b) providing a plurality of shape elements, each shape element defining a surface and having an opacity that varies over the surface;
- c) assigning a focal point to each of the shape elements, wherein the opacity of each shape element varies with distance from the focal point;
- d) identifying a plurality of substantially equidistant points within each texture region;
- e) placing a shape element at each identified point such that adjacent shape elements overlap with each other to provide a substantially uniform opacity within each texture region; and
- f) rendering the shape elements for output to a printer or display device such that an interference of the opacities of the overlapping elements generates an interference texture within each texture region.

37. (Previously Presented) A method as claimed in claim 36 wherein the points are identified using a mesh-fitting algorithm.

38. (Currently Amended) A computer program product comprising program code recorded on a machine-readable recording medium, for controlling the operation of a data processing apparatus on which the program code executes to perform a method of generating an interference texture for an image, wherein said method comprises the steps of:

- a) defining at least one texture region within the image;
- b) providing a plurality of shape elements, each shape element

defining a surface and having an opacity that varies over the surface;

c) assigning a focal point to each of the shape elements, wherein the opacity of each shape element varies with distance from the focal point;

e) d) identifying a plurality of substantially equidistant points within each texture region;

f) e) placing a shape element at each identified point such that adjacent shape elements overlap with each other to provide a substantially uniform opacity within each texture region; and

g) f) rendering the shape elements for output to a printer or display device such that an interference of the opacities of the overlapping elements generates an interference texture within each texture region.